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ABSTRACT

This study was based on the premise that college students who perceive themselves to matter to their institutions will be more involved and inclined to persist in their educational experiences than those who perceive themselves to be marginalized. The study pursued the question of possible relationships among student perceptions of mattering, involvement, and persistence with emphasis on nontraditional student issues. A questionnaire, the Mattering Scales for Adult Students in Postsecondary Education, with additional sections to measure perceptions of involvement and persistence, was administered to samples of traditional and nontraditional students at a commuter-oriented coeducational institution of 6,500 students that offers associate and bachelor's level degree programs. Relationships were determined among the mattering, involvement, and persistence perceptions of the 67 nontraditional (aged 23 and older) and 222 traditional students who comprised the sample. The perceptions of the institutional environment held by nontraditional and traditional students were unexpectedly similar. With some exceptions, student perceptions of mattering in relation to the institution were independent of their perceived levels of involvement and persistence. As the results of the study were inconclusive, recommendations are qualified by the need for more extensive testing of the mattering construct. (Contains 24 tables and 48 references.) (Author/SLD)

INVOLVEMENT AND PERSISTENCE:
NONTRADITIONAL STUDENT PERCEPTIONS OF THE
STUDENT-COLLEGE RELATIONSHIP

DISSERTATION

College of Human Resources and Education

of

West Virginia University

In Partial Fulfillment of the Requirements for
The Degree of Doctor of Education

by

James L. Butcher, MSW

Morgantown

West Virginia

1997

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ABSTRACT

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By James L. Butcher

This study was based upon the premise that college students who perceive themselves to matter to their institutions will be more involved and inclined to persist in their educational experiences than those who perceive themselves to be marginalized. The study pursued the question of possible relationships among student perceptions of mattering, involvement and persistence with emphasis on nontraditional student issues.

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Table of Contents

	Page
Notice of Copyright	ii
Abstract	iii
Acknowledgements	v
Introduction	1
 CHAPTER I	
Significance of the Study	3
Problem Statement	15
Research Questions	16
 CHAPTER II	
Review of Related Literature	17
 CHAPTER III	
Research Design and Methodology	48
Research Design	48
Sample	50
Administration of Survey	51
Instrument	53
Procedure for Data Analysis	59
Hypothesis	62
Null Hypothesis	63
 CHAPTER IV	
Analysis of Data	64
Characteristics of the Sample	64
Nontraditional Students: Normative and Sample Groups	66
Data Summary Pertaining to Research Question One	67
Age Status	68
Gender Status	69
Enrollment Status	74
Remediation Status	77

Location Status	80
Data Summary Pertaining to Research Questions Two and Three	83
CHAPTER V	
Discussion	89
Discussion of Findings	90
Question 1.	90
Age	91
Gender	93
Enrollment Status	94
Remediation Status	94
Campus Location	94
Question 2.	95
Administration Mattering Subscale and Involvement	95
Advising Mattering Subscale and Involvement . . .	96
Peers Mattering Subscale and Involvement	97
Multiple Roles Mattering Subscale and Involvement	97
Faculty Mattering Subscale and Involvement . . .	98
Question 3.	98
Mattering Subscales Scores and Persistence . . .	99
Conclusions	100
Recommendations	103
Summation	109
References	111
Appendices	116
Appendix A. Questionnaire	117
Appendix B. Mattering Scales Scoring Instructions . .	124
Appendix C. Application for Exemption (WVU)	126
Appendix D. Application for Exemption (FSC)	128

List of Tables

1.	Descriptive Statistics for Subscales	57
2.	Internal Consistency Coefficients (Cronbach Alpha) for The Mattering Scale for Adults in Higher Education (n=511)	58
3.	Demographic Characteristics of the Sample	65
4.	Means and Standard Deviations	67
5.	Independent Measures Comparison of Nontraditional and Traditional Students' Mattering, Involvement, and Persistence Scores	68
6.	Independent Measures Comparison of Male and Female Students' Mattering, Involvement, and Persistence Scores	70
7.	Independent Measures Comparison of Nontraditional Male and Female Students' Mattering, Involvement, and Persistence Scores	70
8.	Independent Measures Comparison of Traditional Male and Female Students' Mattering, Involvement, and Persistence Scores	71
9.	Independent Measures Comparison of Nontraditional Male and Traditional Male Students' Mattering, Involvement, and Persistence Scores	72
10.	Independent Measures Comparison of Nontraditional Females and Traditional Females Students' Mattering, Involvement, and Persistence Scores	73
11.	Independent Measures Comparison of Full-Time and Part-Time Students' Mattering, Involvement, and Persistence Scores	75
12.	Independent Measures Comparison of Nontraditional Full- Time and Traditional Full-Time Students' Mattering, Involvement, and Persistence Scores	75
13.	Independent Measures Comparison of Nontraditional Part- Time and Traditional Part-Time Students' Mattering, Involvement, and Persistence Scores	76
14.	Independent Measures Comparison of Remediated and Nonremediated Students' Mattering, Involvement, and Persistence Scores	78
15.	Independent Measures Comparison of Nontraditional Remediated and Traditional Remediated Students' Mattering, Involvement, and Persistence Scores	78
16.	Independent Measures Comparison of Nontraditional Nonremediated and Traditional Nonremediated Students' Mattering, Involvement, and Persistence Scores	79

17.	Independent Measures Comparison of Main Campus and Branch Campus Students' Mattering, Involvement, and Persistence Scores	81
18.	Independent Measures Comparison of Nontraditional Main Campus and Traditional Main Campus Students' Mattering, Involvement, and Persistence Scores	82
19.	Independent Measures Comparison of Nontraditional Branch Campus and Traditional Branch Campus Students' Mattering, Involvement, and Persistence Scores	82
20.	Relationship Between Administrative Mattering and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df=1)	85
21.	Relationship Between Advising Mattering and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df=1)	85
22.	Relationship Between Peers Mattering and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df=1)	86
23.	Relationship Between Multiple Roles Mattering and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df=1)	86
24.	Relationship Between Faculty Mattering and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df=1)	88

Introduction

To introduce the subject to be considered, the following personal reflection is offered. In several years of experience as a counselor, teacher and program coordinator in education and social service settings, a common theme has become apparent to this writer. In providing services to clients and students in these settings, the common experience has been that of helping people to function within complex organizational environments. This has been especially true within the contexts of colleges comprised primarily of students without a family history of college attendance, and in training programs for dislocated or disadvantaged individuals. In both situations, the requirements of negotiating organizational policies, procedures and practices can be as daunting as the challenge involved in completing the educational program itself.

Through graduate coursework; related reading; viewing teleconferences; the work experience already cited; and my own difficult transition to college life as a first generation student from a small town background, I have developed an interest in the nature of the student-college relationship. Specifically,

the subject of student perceptions of their place within higher education institutions has become my primary focus of study.

To those who have become familiar with these organizational complexities, the above characterization may seem extreme. To one who has assisted many individuals in coping with making their way through educational institutions, it has come to appear obvious that these organizations and those who staff them must continually evaluate the environments in which their students function. While not an original insight, it derives from the intensely personal experiences of an unproductive first year of college and of helping others find their paths through often confusing education systems and structures.

If additional formal education and training beyond the secondary level are to become the norm for our society, then a commitment to the highest possible quality of service is essential to the development of human resources.

Chapter I

Significance of the Study

The purpose of this investigation is to explore student perceptions of their importance to the higher education institutions in which they are enrolled. Based upon the premise that those who perceive themselves as mattering to their institutions will be more successful than those who do not, particular attention will be paid to those results with implications for the structuring of supportive college environments.

Conceptually, this study derives from works to be cited in the areas of student involvement, student persistence and retention; and organizational climate. The primary significance will consist of the contribution to the establishment of linkages in the literature concerning student perceptions of college environments; the student-college relationship; student involvement and persistence; and the structuring of higher education environments for nontraditional students.

This project presents an approach by which institutions can monitor nontraditional student perceptions of the institutions in which they are

enrolled. The focus is not on student development, per se, but on the perceived nature of the relationship of the student to the institutional setting. The information received through this approach could be used in planning, implementing, evaluating and modifying institutional practices in the interest of providing a student oriented climate which enhances the educational process.

There is an overall theme which underlies this project and which is implicit in any consideration of the conditions of access to post-secondary education in America. This theme is that of the on-going discussion in our society as to how educational opportunity may be provided to all who need and wish to pursue post-secondary educational goals. Assuming for the sake of discussion that the broad provision of post-secondary educational opportunities is a socially desirable goal, then the problem is presented as to how to provide these opportunities in ways that maintain academic integrity while creating institutional cultures and climates conducive to student success. Complicating the issue is the social challenge of expanding access to education for nontraditional and first generational college students

who are less likely to be prepared for the demands of college than those with family backgrounds of college attendance.

It is on the point of examining aspects of campus climate which lend themselves to a sense of belonging by students that this project will focus. Still, it would be well to bear in mind that these issues exist within the context of a larger societal discussion regarding equal opportunity and social mobility. Ultimately, there are both pragmatic and ethical questions involved. For if there is a social emphasis on the need for educational attainment beyond the high school level, then it can be argued there is also an obligation to create the best possible conditions for meaningful student success.

For many students, a college or university, or any post-secondary educational setting, can present a climate in which they perceive an institutional indifference to their success or failure. When policies and procedures have evolved to perhaps too great an extent on the basis of institutional convenience rather than legitimate learner needs, a climate of alienation leading to unnecessary discouragement and failure may be created, and a

message of indifference may be communicated to students.

To address this problem, a systematic approach which recognizes that change in one area can affect other areas of an organization can be constructive. This is consistent with a holistic educational approach which views the student as a whole person functioning within an environment. In order for systematic institutional efforts to be undertaken effectively, information about student perceptions of their educational settings is essential to those planning institutional strategies and providing services. This is also consistent with an education administration approach which stresses ongoing monitoring of activities for the purpose of quality improvement.

If students are to succeed in the pursuit of their goals, and if institutions are to thrive in the undertaking of well conceived and executed missions, an understanding of the student-college relationship can contribute to the enhancement of the institutional climate and to the accomplishment of both purposes. If a central purpose of education administration is to create a climate in which optimum student performance

is encouraged, then information describing and analyzing student perceptions of their educational experiences will be valuable in creating such institutional cultures and climates.

This study will build upon and extend the work of Nancy Schlossberg (1984, 1989) who has explored nontraditional student perceptions of their experiences within college settings. As is further discussed in the literature review, Schlossberg (1989) defines mattering as " ... our belief, whether right or wrong, that we matter to someone else. This belief acts as a motivator" (p. 9). In identifying mattering as a motivating factor linked to student behavior, Schlossberg raises the issue of developing institutional climates which enhance student mattering and reduce marginality. She is interested in how such factors as age, gender, social class, race, ethnicity, emotional and financial resources and religion affect the ways in which students deal with the sense of being marginal or mattering. While this project will not attempt to pursue all of these issues, it will include some demographic analysis of students participating in the study. For this study, traditional students will be defined as between 18-22

years of age, and nontraditional as those 23 and older. This designation is consistent with that of the developers of the mattering scales instrument to be utilized (Schlossberg, Lassale, and Golec, 1989). Acknowledging that other factors such as income and family educational background may define one as nontraditional, the composition of the student population to be examined is such that the majority of the students possess some of these characteristics. The institution in question is a commuter oriented setting with an enrollment of about 6,500 students. For the purpose of this study, the use of chronological age provides a workable distinction between members of the overall student population, and also reflects a common usage of the terms traditional and nontraditional in the field of higher education.

In considering what services should be provided to nontraditional students, Schlossberg, Lynch, and Chickering (1989) maintain that most older students who enter college are in transition.

The transition model (Schlossberg, 1984) defines a transition as either an event, as in entering college, or a non-event, as in the failure of an expectation to materialize, that alters an

individual's roles, relationships, routines, and assumptions.

Bridges (1980) presents a model of the transition as consisting of endings; a neutral period of disconnection and reorientation; and new beginnings in which new activities are launched. While the transition concept is not the focus of this paper, it is relevant to the extent that life transitions may influence the overall experience of pursuing post-secondary education.

In an earlier work, Straus (1959) describes the concept of personal development as a transformation process consisting of beginning, middle and ending phases. For Strauss, analysis of the relationships among the phases is critical to understanding this transformation process. This perspective is relevant to the model provided in the review of literature which pertains to the movement of an individual in and through the college experience.

As a means of understanding life changes and relating to students as individuals within a life context, the transition concepts can be useful to those who work with students of all ages in post-secondary settings by helping to sensitize educational

personnel to the differences in their student populations. Institutional practices may need to be reshaped so as to reflect this awareness and to be responsive to student needs inherent in specific circumstances.

Schlossberg, Lynch, and Chickering (1989) view most older students who enter college as being in transition. As a framework for assessing readiness to enter a new learning experience, they identify four influencing factors: situation, self, support and strategies.

An analysis of situation involves an examination of the person's perception of events. Is the personal transition which propels the individual to consider further education positive or negative? Is it expected or unexpected? An expected transition can allow time for planning and preparation, whereas an unexpected transition such as a sudden job loss can create turmoil. At what point of the life cycle and personal development does the transition occur? Is the individual involved in a personal transition or reacting to that of another?

The second factor, that of self, has to do with the personal resources the individual brings to the

transition. Has there been a similar experience? Are options perceived? Is there an optimistic outlook and a capacity for coping with uncertainty?

The third factor, supports, includes such items as financial assets and other forms of support from such sources as family, friends, and coworkers.

Finally, the fourth factor, strategies, refers to approaches and means pursued by individuals in negotiating transitions.

Schlossberg, Lynch, and Chickering suggest that by understanding the nature of transitions, more effective means can be found to cope with them. Changing one's evaluation of the situation; changing the situation itself; and utilizing stress management techniques are cited as examples of employing strategies in negotiating a transition. Those involved in establishing and implementing institutional policies and practices might wish to incorporate an awareness of the transition phenomenon into their planning and evaluation activities.

A key point raised by Schlossberg, Lynch, and Chickering is that to the extent that post-secondary education institutions are oriented primarily to 18-22 year old traditional aged students, the institutions

and nontraditional students will be out of sync. They argue that nontraditionals will tend to be incompatible with the traditional dependent role of student. They advocate a developmental approach by colleges which recognizes these differences and the educational nature of both the academic and nonacademic aspects of a post-secondary experience. In addition to this emphasis, institutions are encouraged to adopt a proactive stance in which student development professionals can identify institutional environmental elements which cause unnecessary problems for nontraditional students in their relationship to the institution. Then, through collaboration among institutional personnel, these problems can be addressed.

Schlossberg and her colleagues further argue that nontraditional students who perceive themselves as mattering to their institutions will be more involved, more successful, and more likely to persist than those who perceive themselves to be marginalized. In order to create climates conducive to involvement and persistence, they believe it is important to both make institutional bureaucracies more responsive to the needs of learners and to assist nontraditionals in

developing an optimistic approach to education. This is seen as especially important for those with complicating factors in their lives such as little support at home and limited coping strategies.

This study will relate the subject of student perceptions of marginality and mattering discussed above to the issues of student involvement and persistence.

Specifically, with regard to involvement and persistence, Tinto (1994) stresses the importance of institutional commitment to the creation of supportive communities within higher education. The exploration of those factors which enhance mattering, and possibly student involvement and persistence, will have relevance to the issue of the quality of the student-college relationship.

In their examination of the need to create responsive programs and services from entry to departure, Schlossberg, Lynch, and Chickering (1989) hypothesize that nontraditional students who score high in mattering will be more involved and inclined to persist in their educational experiences than those who rank low on a mattering scale. They leave it for others to test this hypothesis, and this project is an

effort to contribute to that testing process. Emphasis will be placed on examining possible linkages between mattering levels, student involvement and intentions to persist toward educational goals. The review of literature includes references to the more prominent discussions of student involvement and the related concepts of persistence and retention.

In exploring possible linkages to involvement and persistence raised in the hypothesis by Schlossberg, et al (1989), certain questions regarding student perceptions present themselves. Do they perceive themselves to matter? Are these perceptions linked to perceived levels of academic, faculty, peer, work, family, community and extracurricular involvement? Are these perceptions of mattering related to student inclinations to persist in their educational undertakings? The limitations of the sample and the time frame will not permit sweeping conclusions, but the issues raised by the above noted hypothesis will be analyzed within the limitations of the study.

In undertaking this project, the basic assumption is that those students who rank highly on the mattering subscales, who perceive themselves to be more important to their institutions, will express

higher levels of involvement and persistence and be more likely to achieve their goals than those who rank lower on mattering subscales. While a longitudinal approach would be desirable, this study will be exploratory in nature and could serve as a basis for further research.

Given the phenomena of diverse student populations and changing institutional missions, the results of this and related research could have implications for the structuring, restructuring and implementation of programs and procedures, especially within institutions with significant numbers of nontraditional students. The analysis of results will include a discussion of implications for institutional practices.

This project is intended as a contribution to institutional research which seeks to monitor institutional policies and practices as a means of informing the on-going review and modification of those policies and practices.

Problem Statement

What are the relationships among nontraditional student perceptions of mattering, student expressed

levels of involvement, and their declared intentions to persist as students within their institutions?

Research Questions

1. Do the mattering, involvement and persistence scores of students vary by the demographic categories of: age group (nontraditional v. traditional); gender (male v. female); enrollment status (full-time v. part-time); remediation status (remediated v. nonremediated); and campus location (main campus v. branch campus)?

2. Do students with higher mattering subscales scores perceive themselves to have higher levels of involvement than those with lower mattering subscales scores?

3. Do students with higher mattering subscales scores express stronger inclinations to persist toward completion of educational goals than those with lower mattering subscales scores?

Chapter II

Review of Related Literature

The review of literature covers relatively recent material and includes references to compilations of work related to evaluating student experiences in college settings. While not claiming to be an exhaustive review of literature pertaining to the student-college relationship, it does provide a summary of those contributions bearing upon the issues of student maturing perceptions and the relationships of those perceptions to student involvement and persistence.

Exploring the impacts of college attendance on personal, social and vocational development, Astin (1993) characterizes choices regarding college attendance as among the most important life decisions an individual faces. The three elements of this decision are whether, where and how to attend college. He is seeking research based answers to questions regarding the types of outcomes produced by different types of institutions. For Astin, the positive impacts of undergraduate education appear to be more related to the institutional environment rather than the type of institution (public, private, residential,

commuter, etc.). He identifies faculty, students and peer groups as the critical elements in the creation of effective environments for student development and learning.

In this review of literature, the impacts of varying institutional cultures and climates on student-college relationships are a recurring theme.

In examining why students leave college, Tinto (1993) finds that the departure phenomenon tends to reflect the characteristics of particular institutions and their students more so than forces defined as common to all institutions. While emphasizing the importance of individual and institutional influences, he does conclude that research into departure has produced common themes involving: the disposition of entering students; the character of their interactional experiences; and the influence of external forces. He sees those external forces, while of particular importance in commuting and open-admissions settings, as not central to the development of institutional practices designed to encourage retention.

Tinto (1993) posits linkages between social and academic involvement, as expressed in student contacts

with faculty and other students, as affecting student efforts toward learning, and then, by extension, affecting student persistence. He maintains that to the extent that an institution can create a climate conducive to involvement, it can encourage student persistence and retention. He also urges caution in explaining student departure noting that previous research has inadequately portrayed the variety of patterns of departure and degree completion. For Tinto, decisions by students to leave seem to be connected to factors specific to students and their institutions rather than being characterized by student or institutional patterns common to all or most institutions.

Student involvement is an important theme throughout the literature concerning the impacts of college attendance upon students and the nature of student-college relationships. Astin (1984) defines involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 297). According to Astin, both learning and development are directly linked to the quality and quantity of involvement, and this presents an important challenge for institutions. He

views the nature of this challenge as being so critical that he maintains the effectiveness of educational policies and practices are linked to their capacities to encourage student involvement.

Pace (1984) states that measuring the quality of effort expended by students may provide a means of evaluating the quality of educational experiences. In Pace's view, while institutions are responsible for providing an environment conducive to student learning and development, students can be held accountable for the effort they expend. For Pace, the content of effort must be defined with an awareness that learning and development stem from varied influences and events within the college environment. The focus of his approach to analyzing college environments is on student behavior and the college environmental conditions which influence behavior.

Following a similar theme to those of Astin and Pace, Brower (1992) offers a life task model of student persistence which emphasizes the capacities of students to influence institutional environments in relationship to student goals. In this model, life tasks are those areas of college life and related activities to which students are devoting attention,

time and energy. They are reflective of student goals and expectations which guide their functioning and are categorized into seven life task domains: academic achievement; social interaction; future goal development; autonomy; identity formation; time management; and physical maintenance and well-being. Brower describes life task predominance as the prioritization of the task domains. The ways in which tasks are selected and prioritized demonstrate the means by which students form the environments in which they function. He defines integration as " ... a function of the interaction between students' ability to agree with expectations of the university and their ability to shape the college environment to meet their own expectations" (Brower, 1992, p. 456).

Using as an underlying premise the position that student involvement is a critical factor in learning and development as experienced by college students, Schlossberg (1989) has introduced the concepts of mattering and marginality and related them to such themes as student involvement and persistence, and to institutional concerns with student retention.

Marginality and mattering are presented by Schlossberg (1989) as polar concepts. Based upon work

by Rosenberg and McCullough (1981), they are defined as the perceptions which individuals hold of their places within a variety of settings: e.g., families, organizations and communities. The central question is whether or not the individual perceives himself or herself as mattering within a particular context. Within that context, is the individual significant or marginal? If there is a perceived sense of significance and connection, then the individual will rank high in mattering. If the perceptions are those of insignificance and disconnection, then a sense of marginally exists (Schlossberg, 1989).

Zeller, Hinni, and Eison (1989) maintain that the development of community within an institution can contribute to a greater sense of mattering among all organizational participants including students. In a study utilizing the mattering concept at East Tennessee State University, Warner and Williams (1995) found that the nontraditional aged students surveyed were most positive regarding peer relationships, a subscale measuring their general sense of belonging on campus and acceptance by other students. They were least positive in their perceptions of the institution's acceptance of their multiple roles

responsibilities. The authors found little prior research had been done based upon the mattering concept.

If mattering is a motivating factor linked to behavior, then educators need to consider possible linkages among mattering, involvement and student persistence and seek to develop institutional climates which promote mattering and reduce marginality.

Pascarella and Terenzini (1991), in their review of twenty years of research regarding the effects of college attendance upon students, confirm the importance of involvement to the overall quality of student experiences. They find that student effort and involvement in all aspects of the educational experience are the key variables in shaping the influences of college upon students. This leads them to observe that if this is true, then the question becomes how colleges can develop environments which encourage student involvement.

Kuh, Krehbiel, and Mackay (1988) state that "to a considerable degree, student-environmental fit is a product of the ability of the institution to attract students that will be successful and satisfied" (p. 33). Gonzalez (1989) emphasizes the importance of

institutional norms and values in promoting student involvement and a climate in which students do matter to the institution. He observes that this kind of climate requires an institutional commitment which is not limited to the student affairs organizational component.

While many institutions may only have limited control over the composition of their student bodies, they can undertake efforts to create climates in which students matter and are encouraged to become involved in their educations and persist toward achievement of their educational goals.

For the purpose of this study, the assumption was that an institutional climate which is characterized by high levels of student mattering will be one with higher levels of student involvement and persistence than those in which students tend to perceive themselves as marginalized.

Peterson and Spencer (1990) distinguish between the concepts of culture and climate. They define culture as the underlying values, beliefs and meanings of an institution. Climate refers to those attitudes and values held by organization members. They identify three climate dimensions. First, objective

climate is those patterns of behavior and activity which are observable in an objective manner. Second, perceived climate consists of perceptions by members of how organizational life functions and how it should function. Third, is the psychological climate which focuses on member feelings about the organization and their roles within it. This third dimension is seen by Peterson and Spencer as most closely linked to motivational factors which, in turn, are linked to organizational and individual performance measures. The latter dimension has particular relevance to efforts to consider student perceptions of marginality and mattering in post-secondary educational settings in that the psychological climate likely involves the factors of student mattering, involvement and persistence.

From a more general perspective than that of higher education, Schneider and Reichers (1983) maintain that a conceptual advance in the body of climate theory has been the clarification between psychological climates (meanings individuals attach to work contexts), and organizational climates (averaged meanings people attach to particular features of settings). A related finding they cite is that people

attach meaning to clusters of psychologically related events. This implies that work settings have numerous climates which have specific purposes, as in a climate for achievement, or a climate for service. If sub-climates exist within an organization, then to speak of organizational climate requires a referent. Within higher education settings, these referents would be the various components of institutional settings which shape student experiences.

Conceptually similar to the idea of organizational climates as described above, the research instrument for this study examines dimensions of post-secondary settings identified by Schlossberg, Lassalle, and Golec (1989). The mattering scales measure student perceptions of administration, advising, their multiple roles and relationships to peers and faculty. These scales are means by which to combine individual student perceptions of their institutional environments into averaged meanings which students attach to particular features of these settings. The information produced can then be used by institutions to better understand how their students perceive their experiences in relation to

these five organizational subclimates which reflect different aspects of institutional life.

For Schneider and Reichers (1983), the symbolic interactionist approach offers the strongest theoretical basis for analyzing climate formation. They state its central thesis to be that climates develop through interactions within work groups. An important element identified in this approach is the process involved in newcomer socialization. Social interactions help newcomers develop meanings regarding various aspects of the work context. Through social interaction, individuals develop similar perceptions of the context. Since members of work groups tend to interact with one another, different groups will generate different climates within a single organization. Again, this interactionist analysis offers a theoretical perspective on which to base discussion about the creation of mattering climates and subclimates for students.

Ashforth (1985) also stresses an interactionist approach to climate analysis and discusses the relationship of culture to climate. In Ashforth's view, assuming that culture informs climate in an organization, researchers must understand culture in

order to: (a) perceive climate in approximately the same manner as members; and (b) understand how the climate developed. While particular cultures may not necessarily lead to particular climates, a strong culture may tend to produce a congruent climate. The implication for this project is that an organizational culture emphasizing student mattering may tend to produce a congruent climate (or climates) in which students perceive themselves to matter, and are thus more likely to be involved and to persist in their educational experiences than are those who perceive themselves to be marginalized.

Examination of institutional climates and subclimates may provide the bases for identifying differences among institutions in the ways in which they influence student change and development (Pascarella & Terenzini, 1991). Moran and Volkwein (1988) find that in higher education institutions, subunit factors exert more influence on organizational climate than do overall organizational level factors. They suggest that the decentralized departmental structures of colleges and universities may account for this phenomenon, as opposed to patterns found in other types of organizations which do not have the

independence of college departments. Regarding future research, they stress the importance of specifying the level of analysis being used, organizational or subunit, rather than becoming mired in debates about what constitutes climate.

Consideration of student perceptions of mattering and marginality can be related to the climate for service within an organization. Schneider (1990) favors emphasizing a specific aspect of climate such as service. He stresses that respondents in climate studies must share a frame of reference that makes conceptual sense in order to produce results which may be aggregated for a particular level of analysis in an organization. The overall climate, according to Schneider, consists of individual members' perceptions of the routines and rewards within an organizational setting. These perceptions also form climates for specific foci such as service, innovation, motivation or safety. Schneider's preferred area of focus is service, described as " ... a multifaceted construct, with each facet falling on a continuum" (p. 391). He states that organizations have become increasingly aware of the importance of purposefully seeking positive service outcomes.

In summarizing the implications of studies utilizing a systems perspective toward the student-college relationship in general and commuting students in particular, Jacoby (1989) states that educational outcomes, positive or negative, may derive from characteristics of the institutional environment, as well as from student characteristics. This systems approach assumes that the campus environment can promote or discourage student behaviors. Intervention is directed toward shaping the environment through monitoring students' perceptions and behaviors. She cites Banning and Hughes (1986) who describe the study of campus ecology as involving student behaviors, student characteristics and characteristics of the environment. These elements are related to the building and shaping of institutional environments designed to produce desired outcomes. The concept of campus ecology is defined as including the total ecology of the student in order to account for the varied settings which comprise the commuter student's ecology. From this ecological perspective, Banning and Hughes conclude that institutional interventions should be based on the assumption that outcomes will result not just from student actions, but from

interactions and the relationships formed between students and their college environments.

An examination of the concepts of student involvement and student mattering, and their linkage to the creation of service oriented cultures and climates in post-secondary educational settings, leads to an exploration of student persistence and retention issues. Again, the basic assumption is that a service oriented culture and climate will contribute to high mattering levels among students, and that these will encourage student involvement and persistence.

Tinto (1993) establishes that most departures from college are voluntary with institutional dismissal decisions accounting for less than fifteen percent of departures. He identifies social and intellectual integration into institutions as the key factors in determining student departure/persistence decisions. An absence of integration arises from two sources: incongruence and isolation. Tinto defines incongruence as a perception by the student of a lack of compatibility between the individual and the institution. Isolation is defined as a lack of sufficient interactions between the individual and others within the institution necessary to achieve

either social or intellectual integration. The sociological view represented by Tinto emphasizes the actions within institutions which contribute to the formation of formal and informal contexts which may influence persistence. This perspective promotes a collaborative approach among administration, faculty and staff in the development of policies and procedures.

According to Tinto (1993), the culture and climate of most institutions tend to be formed by dominant subcultures. Members frequently take their lead from these groups and the individuals who comprise them. Those who belong to subcultures whose values and behaviors significantly depart from the mainstream are on the margin of institutional life. Tinto contends that membership in a subculture, whether strongly or marginally related to the mainstream or center, can contribute positively to student persistence. His model advocates some level of integration into at least one institutional subculture is essential to student persistence. For Tinto, the dynamics created by integrative student experiences in both formal and informal academic and social contexts, combined with external influences,

are critical to voluntary decisions by students to persist or depart. He sees students as involved in an ongoing process of evaluating goals and commitments to those goals and to the institutions in which they are enrolled. Tinto also makes the point that institutions need to be aware of the ways in which they contribute to student departures. Not all departures, he notes, are dropouts, a term which implies individual failure. He maintains that use of the term dropout may interfere with the review of social and intellectual climates which can lead to positive institutional change.

With regard to the role of integrative student experiences, Abrahamowicz (1988), in a survey of undergraduates at a large commuter university, found that members of student organizations scored higher than nonmembers in fourteen quality of effort categories. While significant differences were found in only three out of eight environmental rating scores, they were in the important areas of student relationship with faculty, administrators and other students.

Ringgenberg (1989) states that an institutional perception may develop that access to campus

activities is available if students will take the initiative. This presumes that simply providing opportunity is adequate. He views such an approach as especially inadequate when applied to student subgroups such as minorities, women and older students. Ringgenberg stresses that a proactive approach is required to both empower students and encourage their involvement in activities. He argues diversity is not achieved simply through admission of a variety of groups, but rather that meaningful diversity requires commitment to creating the inclusion of all students within a mattering institutional climate. Mills (1989) advocates a coordinative approach to student activities designed to integrate students' educational goals with institutional goals.

In his recent work regarding the impact of college upon students, Astin (1993) observes that assuming that positive peer group relationships contribute to positive student experiences, institutions should pursue policies and practices which encourage peer interaction. He sees such interaction as requiring identification based upon

common ground, and opportunities for sustained interaction among students.

Lenning (1982) expresses a similar view to that of Tinto (1993) in stating that student goals need to be taken into account when discussing retention and attrition issues. He argues that definitions of attrition can be stated in ways that reflect diverse student aspirations and experiences. He maintains these should include consideration of the varying lengths of time students may take to complete programs; or the possibility than enhancing employment prospects, rather than degree completion, may be the primary concern.

The potential importance of integration must be addressed as it relates to this examination of student mattering. While social integration may not be as important to nontraditional students as it is to traditional students, the question as to how they perceive themselves to matter to educational institutions may have significant influence on the persistence of nontraditionals, and, therefore, have organizational and programmatic implications.

In a single year, single institution study, focusing on a non-residential institution, Pascarella,

Duby, and Iverson (1983) found that some parts of Tinto's (1975) original model are applicable to commuter settings. They find the positive influence of academic integration on persistence to be especially consistent regardless of the type of post-secondary institution. However, they find a contradiction in that more socially integrated students may leave commuter colleges in search of better opportunities for social interaction at residential colleges. Thus, in some cases, social integration may not exercise the expected influence. They also find student pre-college characteristics to have a stronger direct influence on persistence among students at commuter rather than residential institutions. Influences other than those associated directly with the college experience are seen as possibly more important to persistence/departure behaviors at commuter institutions. In a review of studies, Bean and Metzner (1985), state that academic performance seems more linked to persistence among traditional than nontraditional students across a variety of institutional types. Pascarella, et al (1983), propose a revised model for analyzing persistence which accounts for differences in settings

and is more applicable to commuter oriented institutions which themselves exist in a variety of forms.

A nine-year, national, multi-institutional study tested the Tinto (1975) model in some depth (Stoecker, Pascarella, & Wolfe, 1988). This study with the addition of two additional sets of variables to the earlier model, institutional characteristics and major field of study, produced results consistent with Tinto's emphasis on the importance in the persistence/withdrawal process of the person-environment fit. They conclude that interventions which encourage student academic and social involvement can positively affect student persistence.

Bean and Metzner (1985) define collegiate social integration as " ... the extent and quality of students' interaction with the social system of the college environment" (p. 507). They found measures of social integration in various studies to include: student participation in activities; peer friendships; relationships with instructors; student perceptions of the quality of these experiences; and an assessment of students' overall satisfaction with their social situation. The literature reviewed by Bean and

Metzner which considered age differences indicated that older students had less concern for social integration issues, and were less involved in campus social activities than traditional age students.

Reflecting upon their prior extensive review of literature, Metzner and Bean (1987) observed that most attrition research had attempted to explain the behaviors of traditional age students while neglecting those 25 and older, and those who generally did not fit the description of the 18-24 year old, full-time, residential college student. They find the reasons why nontraditional students discontinue enrollment to be unclear, and undertake what they characterize as:

" ... the first such study guided by a conceptual model designed to explain the attrition process for nontraditional students" (Metzner & Bean, 1987, p. 16).

In an attempt to apply Tinto's model to a commuter student population, Williamson and Creamer (1988) explain that the main difference between their study and others was in the conceptual and operational definitions of persistence. Of particular concern, dropouts were distinguished from stopouts by defining a dropout as one had not been enrolled in college for

at least twenty months. They contrast this with most studies applying Tinto's model which define a dropout as a student who does not return for the fall semester following initial enrollment, or who is not enrolled at the time of follow-up. Their findings support the Tinto (1993) thesis that social and academic integration are important in student persistence decisions within institutions. When applied to persistence in higher education generally, they found this relationship to be much weaker, and suggest that student background characteristics may play a greater role when applied to more nontraditional students such as commuter populations. Williamson and Creamer state that the most important implication of their study is that a standardized definition of persistence may be needed for research purposes. They see this definition as implying the importance of student background characteristics and drawing a distinction between institutional versus overall persistence. They would not define stopout and transfer decisions as equal to dropping out, or as institutional failures.

Findings by Mallette and Cabrera (1991) indicate that voluntary withdrawal behavior is influenced by

different factors which may vary according to the type of behavior, i.e., dropout or transfer. They found academic performance to be a factor in discriminating between persisters and dropouts, but not between persisters and transfers. In discussing this distinction, they recommend designing studies to account for influences upon transfer decisions. In regard to institutional retention activities, focusing on students' academic abilities, interactions with faculty, and financial situations appear to reduce inclination to drop out of college altogether. However, they find that efforts to strengthen students' institutional and goal commitments are more likely to reduce transfer inclinations.

Grosset (1991) views student retention as an "institutional effectiveness issue" (p. 159) which requires attention to the educational process. In her exploration of the original Tinto (1975) model, the emphasis was on differences in younger and older student persistence, a distinction which she maintains has been neglected in prior persistence research. Generally, the factors of integration defined in the Tinto model were somewhat more closely associated with younger (18-24) than older student persistence. The

most important factor related to older student persistence was a sense of readiness to meet academic demands. Among the recommendations derived from her findings are the need to address institutional factors which promote student withdrawal, and the importance of linking students to a support network at the time of entrance. As the study was conducted at one community college, the results cannot be generalized.

Adult learners, the designation preferred by Krager, Wrenn, and Hirt (1990) who define them as students 25 and older, are likely to doubt their academic abilities and to experience uncertainty regarding authority relationships. They must build their identities as college students in relation to the other identities and roles in their lives. Adapting to the demands of college may not only create new challenges for adult learners, but may revive prior developmental issues in new forms.

Ashar and Skenes (1993) find that for older than traditional aged students, career development is a stronger motivation for persistence than is intellectual development. They observe that a career oriented institutional emphasis may be more conducive to nontraditional student retention than a traditional

academic culture. For the nontraditional management majors examined in their study, the most important factor contributing to student persistence is the social environment in which learning takes place. The social integration of these nontraditionals was related to small class size; the existence of student cohort groups who move intactly through their programs; and supportive climates.

Given the complex relationships among the variables explored in the literature reviewed thus far, combined with sometimes conflicting results in areas such as the significance of academic and social integration among students, the prospects for research into the specific subject of student mattering can seem daunting. If everything that happens on a campus affects the achievement of a college's educational goals positively or negatively (Kuh, Schuh, & Whitt, 1991), then student perceptions of mattering and marginality could well be important elements of institutional climate. This is especially true if climates result in part from interactions between students and institutions. While the orientation of this review has been toward the treatment of the mattering concept as an aspect of climate, assessments

of mattering perceptions might also provide insight into student cultures which Kuh (1990) sees as shaping campus life, and Tinto (1993) identifies as relevant to academic and social integration.

Chickering (1981) maintains that given necessary information, reasonably accurate outcome predictions can be made for different types of students and institutions. Assuming the concepts of mattering and marginality do lend themselves to further research, a campus climate survey would be a primary methodological approach. Baird (1990) states that surveys focusing on particular groups or issues are generally more helpful in understanding campus environments than are broader measures.

The specific issue in question, student mattering, has not been adequately explored in either the psychological or educational literature (Schlossberg, 1989; Warner & Williams, 1995), and additional research could prove useful in the structuring of post-secondary educational offerings that contribute to mattering and reduce levels of marginality as experienced by students. These issues fit well into Peterson's (1988) definition of perceived climate as images held by participants of

organizational life which, regardless of accuracy, may influence behavior.

The impact of research into mattering/marginality issues upon institutional practices would depend in part on how studies were conducted. Upcraft and Schuh (1996) define the purpose of environmental assessment as helping " ... those responsible for the campus environment to provide the best possible circumstances where students can learn and grow" (p. 167). They continue that each individual may be said to function in a unique environment, and that this makes environmental assessment especially challenging.

In discussing environmental assessment, Astin (1993) characterizes it as " ... not only the most difficult and complex challenge in the field of higher education research, but it is also the most neglected topic in the assessment literature" (pp. 32-33). As noted by Wuest and Jones (1980), the best use of environmental studies as a basis for action requires the participation of the institutional community throughout the research process.

Returning to the theme of student involvement and its potential impacts upon student performance and persistence, Schlossberg, Lynch, and Chickering (1989)

hypothesize that nontraditional students who score high on a mattering scale, who perceive that their presence and success as students are important to their institutions, will demonstrate higher levels of involvement and persistence than those who perceive themselves to be marginalized. They propose that faculty, administrators and staff put themselves in the place of nontraditional students in order to appreciate that the process of entering or re-entering college frequently requires a major reorganization of personal priorities and activities. All of the decisions involved in the choice of a major, selection of classes and everything else that goes into college entry must be made within the context of other, often complex, life events. Educational programs and services should reflect this and be structured to address the different issues which arise during three defined phases of the educational experience: moving into the setting; moving through the process; and moving on to new challenges following the educational experience.

Schlossberg, Lynch and Chickering (1989) maintain that the creation of supportive environments for nontraditional students can result in both external

and internal benefits for institutions. Included among external benefits are an array of institutional-community relationships which are mutually beneficial. Internal benefits can include: increased retention; program improvements for all students; impetus for institutional growth; and increased enthusiasm and energy from administration, faculty and staff.

In evaluating the effectiveness of institutional structures, Culp (1995) contends that the most important factors for consideration are the impacts of these structures upon student success in attaining their goals. J. J. Becherer and J. H. Becherer (1995) conclude that in creating supportive structures, a variety of demonstrations of caring and support can help build connections between students and their institutions which contribute to student success.

Chickering and Reisser (1993) note that person-environment interaction theories focus on how individuals experience specific settings; that developmental differences may influence individual perceptions of environments; and that these differences should be considered in planning and implementing educational activities.

Astin (1993) concludes his study of how traditional age students are affected by the college experience with the observation that while we cannot be certain of the outcomes of that experience, it is reasonable to expect they will be positive. If a sense of mattering is related to a greater likelihood of involvement and persistence, such outcomes as suggested by Astin would seem likely for both traditional and nontraditional students. The research design found in the next section presents an approach to examining possible relationships among these variables from the perspective of student perceptions of their institutional environments.

Chapter III

Research Design and Methodology

Conceptually, this study was based upon the premise that nontraditional students, indeed all students, who score high in mattering will be both more involved and inclined to persist in their educational experiences than those who rank lower in mattering. In order to generate a baseline of student information relevant to the creation of student oriented campus climates, the institutional research component of a college should be linked with retention activities (Klepper, Nelson, & Miller, 1987).

Klepper, et al, stress the importance of obtaining information about student characteristics and perceptions of their experiences within institutions. They conclude that educational excellence and student persistence require the efforts of both academic and student affairs components.

This study was compatible with the concept of educational institutions as interactive systems in which activities within components may affect other components.

Research Design

This design was exploratory in nature. The variables were: student perceptions of mattering, student perceptions of their own levels of involvement, and student inclinations to persist toward educational goals. Measurement included consideration of the following demographic characteristics: age, gender, full-time vs. part-time status, participation in remediation, and main-campus vs. off-campus status.

Affecting this or any project which attempts to examine the nature of the student experience is the complexity of the variables and their relationship to one another. Lenning (1984) discusses research problems in the areas of student-institution interactions observing that variables may be used differently depending upon the nature of the study. The same variable which was predictive value in one study may be a moderating factor in another, and may only need to be controlled for as part of a subgroup in a different context.

There was no attempt to establish cause-effect relationships between student perceptions of mattering and levels of involvement and persistence. It can be

argued that high levels of mattering lead to high levels of involvement or the reverse, and that high levels in both contribute to a greater inclination to persist. The focus was on establishing whether or not a relationship existed, regardless of direction.

Sample

The population for this study was a co-educational institution of 6,500 students offering certificates, associate and bachelor degrees, as well as continuing education classes.

From this population, all individuals enrolled in main campus and branch campus sections of Written English I in the Spring Semester 1996, were selected as a sample. The rationale for this approach was that this course is included in all certificate and degree tracks, and thus is a requirement for graduation. Given this requirement, the assumption was made that those students enrolled for this course would constitute a representative sample of the overall student population.

At the beginning of the 1995-96 academic year, nontraditional students (23 and older) totaled 2,509 (38%) out of a total student population of 6,547. Of the 465 students enrolled in English 104 at the

beginning of the semester, 364 (78%) were traditional aged (18-22), and 101 (22%) were nontraditional aged (23 & older) students. There were 309 questionnaires completed in late April 1996. This was a participation rate of 66% of those enrolled at the beginning, and allowing for absenteeism at the time of administration, previous withdrawals from the class, and decisions not to participate, this was a good level of participation. When 20 incomplete questionnaires were discarded, the 289 remaining questionnaires constituted 62% of those students who began the course. Of these 289, 222 (77%) were traditional aged students (18-22), and 67 (23%) were nontraditional aged (23 & above). Thus, the proportion of each age group analyzed was virtually the same as the total semester enrollment of those groups for the course sections surveyed. However, the percentage of nontraditionals in the sample was less than that found in the total institutional population. This was a weakness in the study, as it had been expected that surveying the sections of this required course would produce proportions closer to those of the total population.

Administration of Survey

Applications for exempt research were approved based upon the characteristics of the survey: voluntary participation, anonymity of respondents, absence of sensitive personal information, and absence of impact upon the grades of students enrolled in the sections. The questionnaires were administered to those who wished to complete them on a voluntary basis during class sessions. No record of individual participation was kept, and the anonymity of respondents was maintained in the collection of the questionnaires.

Instructions were read, and questionnaires were distributed by the instructors for the class sections being surveyed. Those students from the sample class sections who voluntarily participated placed their completed questionnaires into collection folders or boxes in their classrooms. Each packet of submitted questionnaires was returned to the division office of the Language and Literature Division by the instructors for those course sections. The section packets were then retrieved by the investigator who played no direct role in the distribution or collection of the questionnaires.

Instrument

The instrument utilized for this study was The Mattering Scales for Adult Students in Higher Education (MHE) (Schlossberg, Lassalle, & Golec, 1989). The MHE (Appendix A) is a campus environmental measure designed to assess the perceptions of nontraditional aged students (23 years of age or older) regarding their educational environments. It was not designed to measure individual satisfaction, but rather to reveal generally held perceptions within the nontraditional population of a higher education institution. Individual responses to the 45-item questionnaire are not considered meaningful and are not to be interpreted.

The MHE is structured in order to include different components of the institutional setting which shape the overall student experience and may affect student persistence-departure behavior. These components are represented by five subscales for which scores are interpreted. According to the MHE Manual, subscale intercorrelations indicate that combined scores for all five subscales should not be interpreted.

Subscale descriptions and guidelines for interpretation of scores as stated in the MHE Manual are as follows:

The **Administration Subscale** measures adult students' perceptions of the extent to which campus policies and procedures are sensitive to adult student concerns. **High scorers** may describe their campus policies as accommodating in terms of timing of class offerings, payment of fees, and registration scheduling. They may also report campus activities and student newspaper articles relevant to adult students' concerns.

The **Advising Subscale** measures adult students' perceptions of the extent to which advisors and other information providers attend to their questions and concerns. **High scorers** may describe positive experiences with faculty advisors who are available at convenient times and who appear interested in their concerns. They may also report a clear understanding of administrative rules and regulations and accessibility of administrative staff.

The **Peers Subscale** measures adult student's perceptions of the extent to which they feel they belong on campus and are accepted as peers in the classroom. **High scorers** may describe feeling comfortable in the classroom and a sense of camaraderie with other students. They may report a give-and-take relationship where their different strengths and weaknesses are as accepted as those of traditional aged students.

The **Multiple Roles Subscale** measures adult students' perceptions of the extent to which the campus acknowledges competing demands on their time. **High scores** may describe rules and policies flexible enough to allow students to meet other responsibilities. They may report evening hours for administrative offices, options for part-time students, or some acknowledgement of their other responsibilities.

The **Faculty Subscale** measures adult students' perceptions of the extent to which

faculty members accept them in the classroom. **High scorers** may describe a feeling of comfort in the classroom. They may report that they are treated equitably in comparison with traditional aged students. They may describe faculty members who are accepting of their life experiences and who welcome diversity in the classroom.

The MHE consists of 45 items that generate the five subscale scores. These items ask respondents to agree or disagree with statements pertaining to their institutions. Items are scored on a five-point scale with five representing a high score on mattering, and one a low score. In order to avoid response sets, the manual notes, scoring for some items was reversed with five representing a low score and one a high score on mattering.

Normative data for the MHE were developed from surveying 605 nontraditional aged students at 23 colleges and universities. This sample included 16 four-year and seven two-year institutions. Eight of the four-year and three of the two-year institutions had less than 10,000 undergraduates. All of the institutions were public except for three private

colleges. Below is a table from the MHE Manual which displays the descriptive statistics for the five subscales.

Table 1

Descriptive Statistics for Subscales

Subscale	Group	Mean	SD	N
Administration	2-year	39.25	3.13	7
	4-year	33.04	4.13	16
	Combined	34.93	4.78	23
Advising	2-year	30.22	1.95	7
	4-year	27.96	2.58	16
	Combined	29.63	2.53	23
Peers	2-year	41.36	.89	7
	4-year	37.84	3.30	16
	Combined	39.02	3.20	23
Roles	2-year	22.66	.95	7
	4-year	21.90	2.08	16
	Combined	22.13	1.82	23
Faculty	2-year	29.65	1.45	7
	4-year	27.84	2.12	16
	Combined	28.39	2.08	23

With regard to content and construct validity, the MHE was based upon interviews with nontraditional aged students and a review of the literature concerning that group. A factor analysis was conducted which resulted in the identification of five dimensions which became the five mattering subscales. Instrument items were written for each subscale. As an indication of reliability, internal consistency coefficients for the five mattering subscales are displayed in the table below from the MHE Manual.

Table 2

Internal Consistency Coefficients (Cronbach Alpha)
for The Mattering Scale for Adults
in Higher Education (n=511)

Subscale Alpha	No. of Items	M	SD	Cronbach
Administration	11	32.42	7.12	.85
Advising	8	28.40	5.46	.82
Peers	11	39.66	6.41	.86
Roles	7	22.14	4.80	.77
Faculty	8	28.73	5.02	.82

In order to examine the significance of student perceptions of mattering, supplemental subscales were developed in the areas of student involvement and persistence. The rationale for these additional subscales was to pursue possible relationships among the dimensions of mattering and student perceptions of their own levels of involvement and inclination to persist toward educational goals. The specific items pertaining to involvement and persistence were based upon themes found in the literature review with particular reference to Astin (1993) on involvement and Tinto (1993) on persistence. These items were created specifically for this study, and prior normative results do not exist. The format was the same as for the mattering items with possible responses ranging from strongly disagree to strongly agree (Appendix A).

Procedure for Data Analysis

Each questionnaire was individually scored. The subscale scores for each of the areas of mattering, involvement and persistence were then entered for statistical analysis by computer using the SYSTAT for Students Software Package.

Given that the institution which was studied has both baccalaureate and associate degree programs, and a community college component, the combined mean scores for two- and four-year institutions found in Table 1 were seen as most reflective of the characteristics of the population examined in this study, and were used as a basis for categorizing subscale scores as high or low. The normative data were obtained from the MHE Manual. For mattering scales data related to the normed data, high scores were defined as those above the normed mean, and low scores were defined as those below the normed mean.

The involvement and persistence subscales were created for this study by the researcher, and normed data were not available in relating involvement and persistence scores to the mattering scores obtained from this sample. For the analyses of the five mattering subscales as related to the variables of

involvement and persistence, high scores were defined as those above the mean, and low were defined as those below the mean.

The specific areas of mattering, involvement, and persistence examined were organized as follows:

Mattering Measures	Involvement Measures	Persistence Measures
Administration	Academic	Plan for Completion
Advising	Faculty	Commitment
Peers	Peers	Capacity for Coping
Multiple Roles	Work	Vocational Utility
Faculty	Family	Academic Utility
	Community	
	Extracurricular	

To reiterate a key point raised both in the justification and the review of literature, the concept of student mattering has not been adequately explored in either the educational or psychological literature. This study was effort to accept the challenge offered by Schlossberg, Lynch, and Chickering (1989) in their statement,

"We hypothesize, but leave it for others to test, that adults who score high in mattering - that is, who feel noticed, appreciated, and depended upon by their institutions - will become and remain more involved in higher education" (p. 29).

In a slight departure from the hypothesis quoted above, this study included both traditional and non-traditional students in order to provide for possible comparisons.

The Pearson chi-square test was used in order to determine levels of relationships among the five student mattering subscales, the seven indicators of student involvement, and the score for inclination to persist toward completion of educational goals. Differences below the .05 level were considered not to be attributable to chance. While the mattering scales were designed for use with nontraditional aged students, most of the questions are not necessarily age specific in nature, and comparisons were made between the two age groups with reservations as to the limitations of the original instrument with regard to traditional aged students. The mattering, involvement and persistence scores were analyzed by the demographic categories of age (traditional v. nontraditional); gender (male v. female); location (on-campus vs. off-campus); enrollment status (full-time vs. part-time) and remediation status (remediated vs. nonremediated) t test analysis. Utilizing pooled

variances, differences were considered significant at the .05 level.

In summation, the first research question dealt with the relationships among the five mattering subscales and the demographic categories cited in the previous paragraph. The second research question related mattering subscales rankings to seven forms of involvement. The third question related the five mattering subscales rankings to a persistence score meant to measure the inclinations of respondents to persist toward the completion of educational goals (Research questions are found on pages 16 and 17).

To review, all measures, both the original mattering instrument and the involvement and persistence sections created for this study, were intended to assess general perceptions of higher education environments. Thus, individual scores were not considered meaningful and were not interpreted. The project was guided by the hypotheses stated below.

Hypothesis. Assuming that a sense of mattering is important to students, those who score higher in mattering will be more involved in their educational experiences, and therefore, express higher intentions

to persist in the pursuit of their educational goals, than those with lower mattering scores.

Null Hypothesis. Involvement and inclination to persist toward educational goals are independent of perceptions of mattering. That is, student involvement and persistence in educational activities should not be related to perceived levels of mattering.

Chapter IV

Analysis of Data

This chapter presents the collected data and the results of the analyses performed on that data. A brief commentary describes the nature of the data being reported in each area of the study. The data were organized around the three research questions which guided the research.

Characteristics of the Sample

The demographic characteristics of age (traditional v. nontraditional); gender (male v. female), enrollment status (full-time v. part-time); location status (main campus v. branch campus); and remediation status (remediated v. nonremediated) are summarized in Table 3. To emphasize a point made in the previous chapter regarding the age distribution of the sample, the proportions of traditional aged (18-22) and nontraditional aged (23 and above) students who completed questionnaires were virtually the same as their representations in the total enrollment for the course sections surveyed. There were 222 respondents in the traditional group, and 67 who completed questionnaires in the nontraditional group.

Table 3

Demographic Characteristics of the Sample

Variables	Frequency	Percentage
GENDER		
Male	138	48
Female	151	52
NONTRADITIONAL		
Male	33	49
Female	34	51
TRADITIONAL		
Male	105	47
Female	117	53
AGE		
18-22	222	77
23 and above	67	23
NONTRADITIONAL AGES		
23-30	40	60
31-40	18	27
41-50	8	12
51 and above	1	1
ENROLLMENT STATUS		
Full-Time	260	90
Part-Time	19	10
REMEDICATION STATUS		
Remediated	193	68
Nonremediated	96	32
LOCATION STATUS		
Main Campus	224	78
Off-Campus	65	22

Nontraditional Students: Normative and Sample Groups

Combined mean scores for two and four-year institutions (Table 3) from the normative group were utilized in these calculations. The combined means represented populations that were most comparable to the population from which the sample was drawn. Normative data were only available for nontraditional student responses to the five mattering subscales. No normative data existed for either traditional or nontraditional students' involvement and persistence scores because these measures were created for this study. To permit comparison of the two groups, mean scores for both traditional and nontraditional students in the sample were calculated. In comparing the mean scores for the sample group of nontraditional students and the normative scores, obtained from nontraditionals only, the only significant difference was found in the scores for the advising subscale. Advising subscales scores for nontraditional students who comprised the sample were significantly lower than the normative scores for that subscale. The difference between the two for the faculty subscale approached significance at the .05 level.

Table 4

Means and Standard Deviations

Mattering	Norm Mean	SD	NT Mean	SD	Trad Mean	SD
Administrative	34.93	4.78	35.08	6.71	36.27	5.26
Advising	29.63	2.53	26.03	6.02	26.94	5.38
Peers	39.02	4.30	38.97	6.11	37.45	5.28
Multiple Roles	22.13	1.82	21.54	4.25	21.74	3.91
Faculty	28.39	2.08	27.24	4.68	26.96	4.31

The range of minimum and maximum scores for each of the five mattering subscales, the seven measures of student involvement, and the measure of student inclination to persist toward completion of educational goals were as follows: administration (12-60); advising (8-40); interaction with peers (11-55); multiple roles (7-35); and interaction with faculty (8-40); for each involvement item: (1-10); and for persistence (5-25).

Data Summary Pertaining to Research Question One

Do the mattering, involvement and persistence scores of students vary by the demographic categories of age group (traditional v. nontraditional); gender (male v. female); enrollment status (full-time v.

part-time); remediation status (remediated v. nonremediated); and campus location (main campus v. branch campus)? The mattering, involvement and persistence scores of each demographic category were compared using an independent measures *t* test. The results are displayed in Tables 5-19.

Age Status

Table 5

Independent Measures Comparison of Nontraditional and Traditional Students' Mattering, Involvement, and Persistence Scores

Variable	Nontraditional n = 67		Traditional n = 222		t	p*
	M	SD	M	SD		
Mattering						
Administration	35.08	6.71	36.27	5.26	1.525	0.128
Advising	26.03	6.02	27.94	5.38	1.176	0.241
Peers	38.97	6.11	37.45	5.28	-1.994	0.047*
Multiple Roles	21.54	4.24	21.74	3.91	0.37	0.712
Faculty	27.24	4.68	26.96	4.31	-0.463	0.643
Involvement						
Academic	8.06	1.87	7.20	2.03	-3.083	0.002*
Faculty	2.90	2.46	2.98	2.17	0.277	0.782
Peer	4.60	2.92	5.68	2.82	2.735	0.007*
Work	5.97	3.77	4.49	3.44	-3.027	0.003*
Family	7.45	3.06	6.26	2.92	-2.897	0.004*
Community	4.00	2.81	3.99	2.87	-0.034	0.973
Extracurricular	2.40	2.54	4.23	3.16	4.326	0.000*
Persistence	20.78	4.78	20.29	3.75	-0.896	0.371

* Significant at $p < .05$

The comparisons of the mattering subscales mean scores for nontraditional and traditional students (Table 5) resulted in only one area of difference not attributable to chance. On the Peers Subscale, which measures students' perceptions of their acceptance as peers by other students, the nontraditional students in the sample scored significantly higher than the

traditional students. The opposite had been expected. For the seven involvement variables, more differences were found. Nontraditional students scored significantly higher in the areas of academic, work and family involvement, while traditional students were significantly higher in the areas of peer and extracurricular involvement. There was an apparent contradiction in that nontraditionals ranked higher in peer mattering, and traditionals ranked higher in peer involvement, but there was no immediate means of reconciling this apparent discrepancy. No difference existed between the two groups in their inclinations to persist toward completion of educational goals that was not attributable to chance.

Gender Status

The comparisons of the mattering subscales mean scores for males and females (combined age groups) (Table 6) identified significant differences in the areas of peers and multiple roles. The Multiple Roles Subscale measures students' perceptions of the extent to which an institution recognizes varied student roles and is flexible in allowing students to meet

Table 6

Independent Measures Comparison of Male and Female Students' Mattering, Involvement, and Persistence Scores

Variable	Male n = 138		Female n = 151		t	p*
	M	SD	M	SD		
Mattering						
Administration	35.73	5.84	36.23	5.46	-0.752	0.452
Advising	26.32	5.51	27.10	5.66	-1.198	0.232
Peers	36.95	5.82	38.58	5.11	-2.530	0.012*
Multiple Roles	21.17	3.80	22.17	4.11	-2.139	0.033*
Faculty	26.87	4.66	27.16	4.14	-0.559	0.576
Involvement						
Academic	7.27	2.06	7.52	1.99	-1.071	0.285
Faculty	3.12	2.52	2.82	1.94	1.172	0.242
Peer	5.14	2.93	5.70	2.80	-1.653	0.099
Work	5.35	3.55	4.36	3.53	2.377	0.018*
Family	6.20	3.08	6.83	2.88	-1.802	0.073
Community	3.91	3.06	4.07	2.65	-0.477	0.634
Extracurricular	3.98	3.29	3.65	2.97	0.896	0.371
Persistence	19.75	4.66	21.00	3.20	-2.677	0.008*

* Significant at $p < .05$

Table 7

Independent Measures Comparison of Nontraditional Male and Female Students' Mattering, Involvement, and Persistence Scores

Variable	Male n = 33		Female n = 34		t	p*
	M	SD	M	SD		
Mattering						
Administration	34.88	6.40	35.27	7.09	0.234	0.816
Advising	26.82	5.24	25.27	6.68	-1.057	0.294
Peers	37.55	6.83	40.35	5.05	1.918	0.059
Multiple Roles	20.94	3.97	22.12	4.48	1.138	0.259
Faculty	26.49	4.43	27.97	4.87	1.306	0.196
Involvement						
Academic	7.94	1.64	8.18	2.08	0.517	0.607
Faculty	3.12	2.90	2.68	1.95	-0.738	0.463
Peer	4.42	2.87	4.77	3.00	-0.475	0.637
Work	6.70	3.56	5.27	3.88	-1.574	0.120
Family	7.06	3.39	7.82	2.69	-1.022	0.311
Community	4.03	3.16	3.97	2.47	-0.086	0.931
Extracurricular	3.06	3.19	1.77	1.46	-2.149	0.035*
Persistence	19.88	5.96	21.68	3.10	1.556	0.125

* Significant at $p < .05$

Table 8

Independent Measures Comparison of Traditional Male and Female Students' Mattering, Involvement, and Persistence Scores

Variable	Male n = 105		Female n = 117		t	p*
	M	SD	M	SD		
Mattering						
Administration	36.00	5.66	36.51	4.88	-0.725	0.469
Advising	26.16	5.61	27.63	5.09	-2.047	0.042*
Peers	36.76	5.49	38.06	5.04	-1.838	0.067
Multiple Roles	21.25	3.76	22.19	4.02	-1.796	0.074
Faculty	26.99	4.74	26.92	3.90	-0.116	0.908
Involvement						
Academic	7.08	2.14	7.33	1.93	-1.012	0.313
Faculty	3.12	2.40	2.86	1.95	0.921	0.358
Peer	5.36	2.93	5.97	2.70	-1.600	0.111
Work	4.92	3.45	4.09	3.39	1.804	0.073
Family	5.93	2.94	6.55	2.88	-1.570	0.118
Community	3.87	3.05	4.09	2.71	-0.588	0.557
Extracurricular	4.27	3.28	4.20	3.07	0.165	0.869
Persistence	19.71	4.21	20.81	3.21	-2.188	0.030*

* Significant at $p < .05$

other responsibilities. Females scored significantly higher in perceiving that they were accepted as peers, and that the institution was responsive to their multiple role demands. The only involvement variable which differed significantly by gender was work for which males scored a higher level of involvement. Females reported higher levels of family and peer related involvement which did not quite reach levels of significance. Female students in the sample did score significantly higher than males in their inclinations to persist toward educational goals.

When traditional and nontraditional males and females were analyzed within their age groups, there were few significant differences. The more interesting results were the significantly higher

advising mattering and persistence scores for traditional female students over traditional male students.

Table 9

Independent Measures Comparison of Nontraditional Male and Traditional Male Students' Mattering, Involvement, and Persistence Scores

Variable	NT Male n = 33		Trad Female n = 105		t	p*
	M	SD	M	SD		
Mattering						
Administration	34.87	6.40	36.00	5.68	0.338	0.469
Advising	26.81	5.24	26.16	5.51	0.553	0.042*
Peers	37.54	6.83	36.76	5.49	0.502	0.067
Multiple Roles	20.94	3.97	21.25	3.76	0.686	0.074
Faculty	26.49	4.43	26.99	4.74	0.588	0.908
Involvement						
Academic	7.94	1.64	7.06	2.14	0.032*	0.313
Faculty	3.12	2.90	3.12	2.40	0.996	0.358
Peer	4.42	2.87	5.36	2.93	0.109	0.111
Work	6.70	3.56	4.92	3.45	0.012*	0.073
Family	7.06	3.39	5.93	2.93	0.066	0.118
Community	4.03	3.16	3.87	3.05	0.790	0.557
Extracurricular	3.06	3.19	4.27	3.28	0.066	0.869
Persistence	19.88	5.96	19.71	4.21	0.860	0.030*

* Significant at $p < .05$

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Table 10

Independent Measures Comparison of Nontraditional
Females and Traditional Females Students' Mattering,
Involvement, and Persistence Scores

Variable	NT Females n = 34		T Females n = 117		t	p*
	M	SD	M	SD		
Mattering						
Administration	35.27	7.09	36.51	4.88	-1.175	0.242
Advising	25.27	6.68	27.63	5.09	-2.217	0.028*
Peers	40.35	5.05	38.06	5.04	2.337	0.021*
Multiple Roles	22.12	4.48	22.19	4.02	0.088	0.930
Faculty	27.97	4.87	26.92	3.90	1.302	0.195
Involvement						
Academic	8.18	2.08	7.33	1.93	2.207	0.029*
Faculty	2.68	1.95	2.86	1.95	-0.469	0.639
Peer	4.77	3.00	5.97	2.70	-2.229	0.027*
Work	5.27	3.88	4.09	3.39	1.713	0.089
Family	7.82	2.69	6.55	2.88	2.307	0.022*
Community	3.97	2.47	4.09	2.71	-0.238	0.812
Extracurricular	1.77	1.46	4.20	3.07	-4.469	0.000*
Persistence	21.68	3.10	20.81	3.21	1.393	0.166*

* Significant at $p < .05$

Only two areas showed significant differences between nontraditional and traditional males (Table 9). Nontraditional males scored significantly higher in both academic and work involvement.

Females demonstrated several areas of difference (Table 10). Nontraditional females scored significantly higher on the peers mattering subscale, a measure of perceptions of belonging and being accepted as students, than did traditionals. Traditional females scored, significantly higher on the advising mattering subscale. This is interesting in that the results seem somewhat contradictory. Nontraditional females were significantly higher than traditional females in their perceived levels of

academic involvement, as were nontraditional over traditional males. Nontraditional females, as expected, also scored significantly higher in family involvement. Traditional females were significantly higher in their perceived levels of involvement with peers and in extracurricular activities.

Enrollment Status

Comparisons of mattering subscales scores by full-time v. part-time enrollment status (Table 11) found no significant relationships between enrollment status and any of the five mattering components. Full-time students did score significantly higher than part-time students in relation to involvement with student peers. There were no other involvement measures which met the test of significance, although higher work involvement scores for part-time students, and higher extracurricular involvement levels for full-time students nearly met the significance test, as would be expected for those categories. Full-time students scored significantly higher in their inclinations to persist toward educational goals.

Table 11

Independent Measures Comparison of Full-Time and Part-Time Students' Matting, Involvement, and Persistence Scores

Variable	Full-Time n = 260		Part-Time n = 29		t	p*
	M	SD	M	SD		
Matting						
Administration	36.05	5.60	35.43	6.07	0.557	0.578
Advising	26.85	5.64	25.61	4.39	1.126	0.261
Peers	37.78	5.49	38.00	5.82	-0.202	0.840
Multiple Roles	21.77	3.99	21.04	4.01	0.921	0.358
Faculty	27.03	4.41	26.93	4.27	0.117	0.907
Involvement						
Academic	7.40	2.02	7.46	2.10	-0.173	0.863
Faculty	3.01	2.27	2.50	1.92	1.150	0.251
Peer	5.55	2.85	4.32	2.87	2.160	0.032*
Work	4.71	3.52	5.96	3.79	-1.777	0.077
Family	6.45	2.97	7.29	3.07	-1.406	0.161
Community	4.00	2.83	3.89	3.07	0.189	0.850
Extracurricular	3.91	3.14	2.82	2.76	1.763	0.079
Persistence	20.60	3.67	18.57	6.15	2.573	0.011*

* Significant at $p < .05$

Table 12

Independent Measures Comparison of Nontraditional Full-Time and Traditional Full-Time Students' Matting, Involvement, and Persistence Scores

Variable	NT Full-Time n = 53		T Full-Time n = 206		t	p*
	M	SD	M	SD		
Matting						
Administration	34.83	7.18	36.31	5.05	1.727	0.085
Advising	25.89	6.47	27.05	5.35	1.353	0.177
Peers	39.06	6.31	37.40	5.23	-1.965	0.050
Multiple Roles	21.49	4.38	21.81	3.88	0.513	0.608
Faculty	27.04	4.87	27.02	4.31	-0.034	0.973
Involvement						
Academic	7.89	1.89	7.26	2.05	-2.013	0.045*
Faculty	2.93	2.54	3.03	2.20	0.298	0.766
Peer	4.81	3.00	5.71	2.80	-2.064	0.040*
Work	5.68	3.85	4.42	3.40	-2.335	0.020*
Family	7.23	3.12	6.24	2.92	-2.158	0.032*
Community	3.94	2.81	3.98	2.82	0.074	0.941
Extracurricular	2.49	2.65	3.18	3.18	-3.768	0.000*
Persistence	21.32	4.26	20.41	3.50	-1.611	0.108

* Significant at $p < .05$

Table 13

Independent Measures Comparison of Nontraditional
Part-Time and Traditional Part-Time Students'
Mattering, Involvement, and Persistence Scores

Variable	NT Part-Time n = 14		T Part-Time n = 13		t	p*
	M	SD	M	SD		
Mattering						
Administration	36.00	4.97	35.15	7.63	0.353	0.727
Advising	26.57	4.00	24.54	4.88	1.189	0.246
Peers	38.64	5.49	37.39	6.53	0.544	0.591
Multiple Roles	21.71	3.83	20.54	4.33	0.748	0.461
Faculty	28.00	3.94	26.00	4.60	1.216	0.235
Involvement						
Academic	8.71	1.68	6.31	1.75	3.641	0.001*
Faculty	2.79	2.19	2.31	1.65	0.636	0.530
Peer	3.79	2.52	5.15	3.11	-1.262	0.219
Work	7.07	3.32	5.15	4.02	1.357	0.187
Family	8.29	2.73	6.62	3.02	1.511	0.143
Community	4.21	2.89	3.77	3.37	0.369	0.715
Extracurricular	2.07	2.09	3.77	2.24	-1.628	0.116
Persistence	18.79	6.14	18.23	8.62	0.226	0.823

* Significant at $p < .05$

Nontraditional part-time students were significantly higher in their perceived levels of academic involvement than were traditionals. While speculative, it is possible that this might be attributable to greater maturity which could contribute to greater focus and commitment.

Nontraditional full-time students were significantly higher in their perceived levels of work and family involvement than traditionals. Traditional full-time students were significantly higher in peer and extracurricular involvement. These findings were anticipated and support the validity of the involvement section of the instrument which was created for this study.

Remediation Status

There was no significant difference found between the mattering subscales scores of those who had participated in remediation course work as opposed to those who had not taken such courses (Table 14). Those students who had some remedial experience at the college level did report significantly higher levels of involvement with faculty, student peers and in extracurricular activities than those who had not been remediated. Remediated students also expressed a significantly higher inclination to persist in college.

Table 14

Independent Measures Comparison of Remediated and Nonremediated Students' Mattering, Involvement, and Persistence Scores

Variable	Remediated n = 193		Nonremediated n=96		t	p*
	M	SD	M	SD		
Mattering						
Administration	36.18	5.33	35.63	6.22	-0.782	0.435
Advising	26.99	5.46	26.20	5.68	-1.145	0.253
Peers	37.87	5.73	37.66	5.07	-0.311	0.756
Multiple Roles	21.95	4.04	21.18	3.84	-1.563	0.119
Faculty	26.96	4.53	27.15	4.11	0.341	0.733
Involvement						
Academic	7.37	2.00	7.46	2.07	0.337	0.736
Faculty	3.15	2.38	2.58	1.89	-2.039	0.042*
Peer	5.75	2.84	4.79	2.85	-2.689	0.008*
Work	4.93	3.62	4.63	3.47	-0.690	0.491
Family	6.50	3.00	6.60	2.99	-0.286	0.775
Community	4.06	2.79	3.84	2.99	-0.613	0.541
Extracurricular	4.04	3.18	3.33	2.96	-1.824	0.069
Persistence	20.80	3.50	19.62	4.79	-2.388	0.018*

* Significant at $p < .05$

Table 15

Independent Measures Comparison of Nontraditional
Remediated and Traditional Remediated Students'
Mattering, Involvement, and Persistence Scores

Variable	NT Remed n = 36		T Remed n = 155		t	p*
	M	SD	M	SD		
Mattering						
Administration	35.81	6.49	36.21	4.98	0.416	0.678
Advising	26.42	6.04	27.05	5.28	0.632	0.528
Peers	40.14	6.02	37.30	5.57	-2.710	0.007*
Multiple Roles	22.33	4.55	21.83	3.92	-0.678	0.499
Faculty	27.25	5.43	26.85	4.32	-0.481	0.631
Involvement						
Academic	7.92	1.83	7.24	2.04	-1.831	0.069
Faculty	3.17	2.89	3.12	2.25	-0.100	0.921
Peer	4.83	3.04	5.96	2.76	2.168	0.031*
Work	6.33	3.70	4.61	3.54	-2.608	0.010*
Family	7.86	2.89	6.17	2.95	-3.115	0.002*
Community	4.75	2.78	3.88	2.74	-1.715	0.088
Extracurricular	2.75	2.79	4.36	3.21	2.780	0.006*
Persistence	21.97	3.05	20.52	3.57	-2.256	0.028*

* Significant at p < .05

Table 16

Independent Measures Comparison of Nontraditional
Nonremediated and Traditional Nonremediated Students'
Mattering, Involvement, and Persistence Scores

Variable	NT Nonre n = 31		T Remed n = 65		t	p*
	M	SD	M	SD		
Mattering						
Administration	34.23	6.96	36.29	5.77	1.533	0.129
Advising	25.58	6.06	26.49	5.52	0.733	0.465
Peers	37.61	6.03	37.68	4.59	0.058	0.954
Multiple Roles	20.61	3.72	21.45	3.89	0.984	0.323
Faculty	27.23	3.72	27.11	4.32	-0.131	0.896
Involvement						
Academic	8.23	1.93	7.09	2.05	-2.580	0.011*
Faculty	2.58	1.82	2.59	1.94	0.010	0.992
Peer	4.32	2.80	5.02	2.88	1.114	0.268
Work	5.55	3.86	4.19	3.20	-1.824	0.071
Family	6.97	3.22	6.43	2.88	-0.823	0.413
Community	3.13	2.62	4.19	3.11	1.634	0.106
Extracurricular	2.00	2.18	3.97	3.09	3.170	0.002*
Persistence	19.42	5.98	19.71	4.16	0.274	0.784

* Significant at p < .05

Nontraditional students who had received some form of remediation had significantly higher scores on the peers mattering subscale than did traditionals. This may indicate that nontraditionals found the extra attention they received from instructors in remedial courses to be more meaningful than did traditionals.

If so, this could have contributed to perceptions by nontraditionals that they belong and are accepted by other students and faculty as legitimate students.

Nontraditional remediated students also scored significantly higher in persistence.

In other measures, a familiar pattern was repeated, with nontraditional remediated students significantly higher in work and family involvement, and traditionals significantly higher in peer and extracurricular involvement.

Nontraditional nonremediated students were significantly higher in their perceived levels of academic involvement than were traditionals. Nonremediated traditional students were significantly higher in extracurricular involvement. This may indicate differing priorities between the two age groups.

Location Status

The final demographic variable to be analyzed was campus location (Table 17). Branch campus respondents had significantly higher scores in two components of mattering than did students enrolled in main campus sections of the English course being surveyed. Branch campus respondents scored significantly higher on the peers subscale which measures perceptions of belonging

in the setting and acceptance as peers in the classroom. They also scored significantly higher on the faculty subscale which measures perceptions of their acceptance by faculty members in classroom settings. Significantly higher scores were found for branch campus students in relation to work, family and community involvement. Students in the main campus class sections being surveyed scored significantly higher in extracurricular involvement. There was no significant difference by location for persistence.

Table 17

Independent Measures Comparison of Main Campus and Branch Campus Students' Mattering, Involvement, and Persistence Scores

Variable	Main Campus n = 224		Branch Campus = 65		t	p*
	M	SD	M	SD		
Mattering						
Administration	35.86	5.40	36.46	6.40	-0.760	0.448
Advising	26.91	5.57	26.11	5.44	1.024	0.307
Peers	37.32	5.16	39.45	6.37	-2.768	0.006*
Multiple Roles	21.61	3.92	21.99	4.25	-0.663	0.508
Faculty	26.74	4.24	27.99	4.77	-2.022	0.044*
Involvement						
Academic	7.30	2.09	7.75	1.75	-1.599	0.111
Faculty	3.04	2.24	2.71	2.23	1.040	0.299
Peer	5.51	2.93	5.15	2.66	0.877	0.381
Work	4.42	3.48	6.26	3.51	-3.758	0.000*
Family	6.25	3.04	7.63	2.52	-3.428	0.001*
Community	3.84	2.80	4.51	2.98	-1.669	0.096
Extracurricular	4.07	3.15	2.91	2.87	4.664	0.000*
Persistence	20.38	3.69	20.49	4.98	-0.196	0.845

* Significant at $p < .05$

There were few areas of significance found for location status (main campus v. branch campus) (Tables 18 and 19) in relation to age status. For those primarily located at the branch campus,

nontraditionals had significantly higher perceived levels of academic involvement than did traditionals.

Table 18

Independent Measures Comparison of Nontraditional Main Campus and Traditional Main Campus Students' Mattering, Involvement, and Persistence Scores

Variable	NT Main Cam n = 35		T Mont Cam n = 189		t	p*
	M	SD	M	SD		
Mattering						
Administration	34.80	5.90	36.05	5.30	1.261	0.208
Advising	26.63	5.97	26.96	5.50	0.321	0.749
Peers	38.57	5.67	37.09	5.04	-1.567	0.119
Multiple Roles	21.54	4.07	21.62	3.90	-0.113	0.910
Faculty	26.80	4.47	26.73	4.21	-0.089	0.929
Involvement						
Academic	7.77	2.00	7.21	2.10	-1.460	0.146
Faculty	2.83	2.29	3.07	2.24	0.565	0.553
Peer	4.26	2.91	5.74	2.89	2.791	0.006*
Work	5.51	3.98	4.21	3.35	-2.048	0.042*
Family	7.11	3.23	6.05	2.99	-1.917	0.057
Community	4.20	2.95	3.77	2.78	-0.829	0.408
Extracurricular	2.29	2.46	4.40	3.26	3.749	0.000*
Persistence	21.29	2.90	20.21	3.81	-1.583	0.115

* Significant at $p < .05$

Table 19

Independent Measures Comparison of Nontraditional Branch Campus and Traditional Branch Campus Students' Mattering, Involvement, and Persistence Scores

Variable	NT Branch n = 32		T Branch n = 33		t	p*
	M	SD	M	SD		
Mattering						
Administration	35.38	7.58	37.52	4.89	-1.356	0.180
Advising	25.38	6.10	26.82	4.71	-1.070	0.289
Peers	39.41	6.62	39.49	6.21	-0.049	0.961
Multiple Roles	21.53	4.50	22.42	4.01	-0.845	0.401
Faculty	27.92	4.93	28.24	4.68	-0.440	0.662
Involvement						
Academic	8.38	1.68	7.15	1.62	2.987	0.004*
Faculty	2.97	2.66	2.46	1.72	0.930	0.356
Peer	4.97	2.92	5.33	2.41	-0.550	0.584
Work	6.47	3.57	6.06	3.55	0.466	0.643
Family	7.81	2.86	7.46	2.17	0.570	0.570
Community	3.78	2.67	5.21	3.13	-1.979	0.052
Extracurricular	2.53	2.65	3.27	3.07	-1.042	0.302
Persistence	20.25	6.23	20.73	3.44	-0.384	0.702

* Significant at $p < .05$

Data Summary Pertaining to Research Questions Two and Three

Do students with higher mattering subscales scores perceive themselves to have higher levels of involvement than those with lower mattering subscales scores; and do they express stronger inclinations to persist toward completion of educational goals than those with lower mattering scores? For the sake of clarity, the presentation of material pertaining to the second and third questions was consolidated into common tables and discussion sections. This provided opportunities to present information for the three primary variables of mattering, involvement and persistence as they related to one another for both nontraditional and traditional students. For the chi square calculations, high and low scores were defined as those above and below the means respectively. Those differences established at less than the .05 level were considered as not attributable to chance.

For nontraditional students, administration mattering subscale scores were related to extracurricular involvement at a level not attributable to chance (Table 12). High scorers on the administration subscale perceive institutional policies and practices as accommodating their needs

and concerns. Administration scores for traditional students were related to peer involvement at a level not attributable to chance. Persistence was not related to administration mattering scores for nontraditional or traditional students at levels not attributable to chance.

There were no significant relationships between advising mattering subscale scores and any involvement measures for nontraditional students (Table 13). Advising mattering scores were related to faculty, peer and extracurricular involvement at levels not attributable to chance for traditional students. High scorers on the advising subscale express generally positive perceptions of their experiences with advisors and staff, and may also indicate an understanding of procedures. Persistence was not related to high advising scores for nontraditional students at a level not attributable to chance, but was for traditional students.

For nontraditional students, peer mattering scores were not related to any of the seven involvement variables at levels not attributable to chance (Table 14). High scorers on the peers subscale perceive themselves to be accepted in the college setting and to have a sense of belonging. Peer mattering subscale

Table 20

Relationship Between Administrative Mattering and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df = 1)

Involvement Variable	Nontraditional (n = 67)		Traditional (n = 222)	
	χ^2	p	χ^2	p
Academic	0.225	0.635	1.775	0.183
Faculty	1.38	0.239	0.089	0.765
Peer	2.528	0.112	7.776	0.005*
Work	0.225	0.635	1.711	0.191
Family	1.036	0.309	2.490	0.115
Community	2.288	0.130	0.008	0.929
Extracurricular	8.443	0.004*	2.190	0.139
Persistence	0.313	0.576	1.439	0.230

* Significant at $p < .05$

Table 21

Relationship Between Advising Mattering and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df = 1)

Involvement Variable	Nontraditional (n = 67)		Traditional (n = 222)	
	χ^2	p	χ^2	p
Academic	3.035	0.081	1.644	0.200
Faculty	0.057	0.811	10.733	0.001*
Peer	0.206	0.650	21.175	0.000*
Work	0.018	0.892	0.789	0.374
Family	0.008	0.927	0.707	0.400
Community	0.451	0.502	0.381	0.537
Extracurricular	0.002	0.963	14.895	0.000*
Persistence	0.125	0.723	4.278	0.039*

* Significant at $p < .05$

Table 22

Relationship Between Peers Mattering and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df = 1)

Involvement Variable	Nontraditional (n = 67)		Traditional (n = 222)	
	χ^2	p	χ^2	p
Academic	0.387	0.534	3.108	0.078
Faculty	0.014	0.907	4.022	0.045*
Peer	0.729	0.393	22.439	0.000*
Work	2.566	0.109	0.349	0.554
Family	0.008	0.927	4.958	0.026*
Community	0.017	0.895	4.661	0.031*
Extracurricular	1.776	0.183	7.266	0.007*
Persistence	5.411	0.020*	23.078	0.000*

* Significant at $p < .05$

Table 23

Relationship Between Multiple Roles Matterring and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df = 1)

Involvement Variable	Nontraditional (n = 67)		Traditional (n = 222)	
	χ^2	P	χ^2	P
Academic	0.048	0.826	3.054	0.081
Faculty	1.085	0.298	0.260	0.610
Peer	0.025	0.874	4.617	0.032*
Work	0.048	0.826	1.184	0.277
Family	1.061	0.303	3.758	0.053
Community	0.630	0.427	2.111	0.146
Extracurricular	0.925	0.336	0.507	0.477
Persistence	2.068	0.150	3.750	0.053

* Significant at $p < .05$

scores for traditional students were related to the faculty, peer, family, community and extracurricular involvement variables at levels not attributable to chance. Persistence was related to peer matterring scores for both nontraditional and traditional students at levels not attributable to chance.

For nontraditional students, multiple roles matterring scores were not related to any of the seven involvement variables at levels not attributable to chance (Table 15). High scorers on the multiple roles matterring subscale perceive that their institutions have policies and procedures which at least partly acknowledge their other life responsibilities and roles. Multiple roles matterring subscale scores for traditional students were related to the peer and work

involvement variables at levels not attributable to chance. Persistence was related to multiple roles mattering scores for traditional students at a level not attributable to chance, but not for nontraditionals.

For nontraditional students, faculty mattering subscale scores were not related to any of the seven involvement variables at levels not attributable to chance (Table 16). High scorers on the faculty subscale may report equitable treatment by faculty in relation to other students and a general perception that diversity of life experiences is welcomed by faculty in the classroom. Faculty mattering subscale

Table 24

Relationship Between Faculty Mattering and Involvement and Persistence for Nontraditional and Traditional Students Using the Chi Square Statistic (df = 1)

Involvement Variable	Nontraditional (n = 67)		Traditional (n = 222)	
	χ^2	p	χ^2	p
Academic	0.128	0.720	0.548	0.459
Faculty	0.014	0.907	0.732	0.392
Peer	0.376	0.540	2.265	0.132
Work	0.128	0.720	0.459	0.498
Family	0.861	0.353	4.492	0.034*
Community	1.236	0.266	0.009	0.924
Extracurricular	0.124	0.725	0.749	0.387
Persistence	2.623	0.105	3.750	0.053

* Significant at p < .05

scores for traditional students were related to the work involvement variable at a level not attributable to chance. The work involvement item was intended to measure the amount of time students spend working at a

job or jobs while enrolled in college. Persistence was not related to faculty mattering subscale scores for nontraditional or traditional students at significant levels. However, at 0.053, the test of significance was nearly met for traditional students.

Chapter V

Discussion

This chapter presents the findings, conclusions and recommendations derived from this study. To review, the study was exploratory in nature in that it sought to take the relatively new concept of college student mattering and examine its potential relationships to the variables of student involvement and persistence. The overall purposes were to contribute to a better understanding of the mattering concept and its potential usefulness in shaping higher education environments. In particular, the possible relevance of the mattering concept to nontraditional students, was considered.

Given the exploratory nature of the project in attempting to develop greater understanding of the mattering concept, the focus was on establishing whether or not relationships existed among mattering, involvement and persistence regardless of causation. The study was guided by the hypothesis, suggested by Schlossberg, Lynch and Chickering (1989), that those who score higher in areas of mattering will be more involved in their educational experiences, and therefore, express higher intentions to persist in the

pursuit of their educational goals than those with lower mattering scores.

The sample group consisted of 289 students enrolled in all main and branch campus sections of a required course for all degree tracks. Scores for the nontraditional (n = 67) and traditional (n = 222) students were analyzed in developing profiles for each group and in relating how they compared to one another. Mattering, involvement and persistence scores were also analyzed for their possible relationships to specified demographic categories.

Findings and conclusions are presented in reference to each of the three research questions and the hypothesis which guided the research. The problem statement asked: What are the relationships among nontraditional student perceptions of mattering, student expressed levels of involvement, and their declared intentions to persist as students?

Discussion of Findings

The presentation is based upon the research questions developed for this study.

Question 1. Do the mattering, involvement and persistence scores of students vary by the demographic characteristics of: age group (traditional v. nontraditional); gender (male v. female); enrollment

status (full-time v. part-time); remediation status (remediated v. nonremediated); and campus location (main campus v. branch campus)? The mattering, involvement and persistence scores of each demographic category were analyzed using an independent measures t test.

Age

Regarding age, one of the underlying premises of the study was that traditional aged students (18-22) would perceive themselves to matter more to their institution than would nontraditionals (23 and older). Based upon the literature, it was assumed that institutional practices catering to traditional students would produce this result. No such conclusion can be drawn from the findings. In reviewing scores from the five mattering subscales (Table 5), only on the peers subscale did a difference exist between the two at below the .05 level. Nontraditional students actually had a higher level of mattering in terms of feeling comfortable in the classroom and being accepted equally with other students. Possibly nontraditional and traditional students have more issues and concerns in common than had been anticipated. All conclusions pertaining to traditional students should be qualified in that the

questions which produced the mattering subscales scores were intended for nontraditional students. They were applied to traditional students for purposes of this study. Given that only one institution was analyzed, it is possible that a multi-institutional study might produce results more congruent with expectations that nontraditionals would perceive themselves to matter at significantly lower levels than traditional students.

Nontraditional students had significantly higher scores for academic, work and family involvement, while traditional students had significantly higher scores for peer and extracurricular involvement. This may speak well for the validity of the involvement items created for this study, as these results are consistent with expectations for these age groups.

For this sample, being a nontraditional or traditional student was not found to be significantly related to inclination to persist toward completion of educational goals. This could mean that there really is no difference between the two regarding persistence; that the sample was not representative; or, that the persistence section of the instrument is invalid. For this sample, and based upon results using this instrument, nontraditional and traditional

students were similar in the strength of their inclinations to persist as students.

To summarize, age status was primarily found to be significantly related to some types of involvement, but not to mattering and persistence if the higher nontraditional scores in academic involvement are an accurate reflection of behavior, they may bode well for nontraditional persistence. It must be remembered that the mattering, involvement and persistence instrument items were meant to elicit student perceptions, not to measure actual behaviors.

Gender

Women scored significantly higher in perceiving themselves to be accepted equally with other students (peer mattering), and in their perceptions of institutional characteristics accommodating to their other life responsibilities (multiple roles mattering (Table 6)). There were no other gender differences in mattering and involvement scores, although women did score significantly higher in their inclination to persist. The latter might be a result of their perceptions that they are accepted, and that female students perceive institutional actors to be responsive to the multiple life roles which may complicate their functioning as students. This would

require further exploration of gender based differences.

Enrollment Status

Based upon the findings of the study, full-time or part-time status did not appear to influence student perceptions of mattering or involvement (Table 7), but full-time students did express significantly higher inclinations to persist toward completion of their educational goals. The findings do not permit any meaningful conclusions for enrollment status.

Remediation Status

While mattering subscales scores were not found to be significantly associated with remediation status (Table 8), it is interesting that students who had received some remediation had both significantly higher scores for involvement with faculty, and stronger inclinations to persist toward educational goals than did students who lacked remedial course work. Perhaps the experiences found in these courses contribute to bonds with faculty and to building confidence which encourages persistence.

Campus Location

Given that branch campus students had significantly higher scores on the peers and faculty mattering subscales (Table 9), factors such as smaller and more

informal classes may contribute to higher perceptions of mattering among students in that setting. The peers and faculty mattering subscales are similar in that they measure student perceptions of acceptance and equitable treatment by peers and faculty.

Question 2. Do students with higher mattering subscales scores perceive themselves to have higher levels of involvement than those with lower mattering subscales scores? For the Pearson Chi Square applications, high and low scores were defined as those above and below the means respectively. Each of the five mattering variables was analyzed for its relationship to each of the seven involvement variables.

Administration Mattering Subscale and Involvement

There was only one involvement variable for nontraditional students, extracurricular involvement, that was related to administrative mattering at a level not attributable to chance (Table 10). The administration subscale measures student perceptions of campus policies and procedures, and the other six of the seven involvement variables were independent of administrative mattering for nontraditionals. Similarly, only peer involvement was related to administrative mattering for traditionals at a level

not attributable to chance. Generally, involvement scores for both nontraditional and traditional students were independent of their scores on the administration subscale. The findings generally confirm the null hypothesis for nontraditional students.

Advising Mattering Subscale and Involvement

None of the seven involvement variables were related to advising subscale scores for nontraditional students at levels not attributable to chance (Table 11). The advising subscale measures student perceptions of institutional advising procedures and practices. Based upon these findings, all seven involvement variables for nontraditional students were independent of advising mattering scores. Advising for traditional students was related to faculty, peer and extracurricular involvement at levels not attributable to chance. These findings may indicate that, for this sample, nontraditional students have not had advising related experiences conducive to promoting involvement and persistence. This conclusion is reinforced by the finding that the advising subscale mean score for the nontraditional students comprising the sample was significantly lower

than for the normative group. The findings confirm the null hypothesis for nontraditional students.

Peers Mattering Subscale and Involvement

None of the seven involvement variables were related to peers subscale scores for nontraditional students at levels not attributable to chance (Table 12). The peers subscale measures student perceptions of belonging and their acceptance as peers in the classroom. Based upon these findings, all seven involvement variables for nontraditional students were independent of peers mattering scores. Scores on the peers subscale were related to five of seven involvement variables for traditional students at levels not attributable to chance. The findings confirm the null hypothesis for nontraditional students.

Multiple Roles Mattering Subscale and Involvement

None of the seven involvement variables were related to multiple roles subscale scores for nontraditional students at levels not attributable to chance (Table 13). The multiple roles subscale measures student perceptions of institutional procedures and practices in relation to other roles and responsibilities held by students. Based upon these findings, all seven involvement variables for

nontraditional students were independent of multiple roles mattering scores. Multiple roles scores for traditional students were related to peer and work involvement at levels not attributable to chance. The findings confirm the null hypothesis for nontraditional students.

Faculty Mattering Subscale and Involvement

None of the seven involvement variables were related to faculty subscale scores for nontraditional students at levels not attributable to chance. The faculty subscale measures student perceptions of their acceptance and fair treatment by faculty in the classroom. Based upon these findings, all seven involvement variables for nontraditional students were independent of faculty mattering scores.¹⁰ Generally, involvement scores for both nontraditional and traditional students were independent of their scores on the faculty subscale. The findings confirm the null hypothesis for nontraditional students.

On the question as to whether students with higher mattering scores will report higher levels of involvement than those with lower mattering subscales scores, the findings do not permit this conclusion.

Question 3. Do students with higher mattering subscales scores express stronger inclinations to

persist toward completion of educational goals than those with lower mattering subscale scores?

Mattering Subscales Scores and Persistence (Tables 10-14)

Persistence scores for nontraditional students were independent of their mattering subscales scores in four out of five forms of mattering. Persistence was related to peers mattering at a level not attributable to chance for nontraditional and traditional students, as it also was to advising mattering subscale scores for traditional students. For nontraditional students then, the null hypothesis is confirmed that persistence is independent of administration, advising, multiple roles and faculty mattering subscales scores.

For traditional students, the null hypothesis is confirmed that persistence is independent of administration, multiple roles and faculty mattering subscales scores. However, at 0.053, the test of significance was nearly met for persistence in relation to faculty mattering scores for traditional students. Considering that traditionals had a relationship of 0.039 for persistence and advising mattering scores, there is some basis for positing a relationship between the faculty and advising

matterer subscales scores and persistence for traditional students.

Conclusions

The preceding pages revealed the specific instances in which relationships either did or did not exist between the five forms of student mattering and the variables of involvement and persistence. For nontraditional students, there was only one significant relationship among the five forms of student mattering, the seven involvement variables and student inclinations to persist toward educational goals. That was one relationship at a level not attributable to chance out of 40 potential relationships among the mattering, involvement and persistence variables for nontraditional students (23 and older) in this sample. These findings contradicted the expectation that perceptions of mattering would be related to perceived levels of involvement and persistence for nontraditional students. The data generated are not adequate to providing explanations for these findings. Perhaps the instrument sections created to measure involvement and persistence were inadequate for the task. Perhaps the sample was unrepresentative, the statistical methods were not suitable; or factors unique to the

institution and population being sampled may have skewed the results. Whatever the explanations, the hypothesis pertaining to expected relationships among the mattering, involvement and persistence variables could not be accepted for nontraditional students in this setting.

Significant relationships were found for traditional students (18-22) in 13 out of 40 potential relationships among the mattering, involvement and persistence variables. This was more than for nontraditionals, but still weak. Any conclusions regarding traditional students must be tempered by the fact that the mattering scales portion of the instrument had been created for and normed on nontraditional students. The use of that original instrument in surveying traditional students, as well as nontraditionals, was in an effort to supplement the primary findings pertaining to nontraditional students, and to produce some potentially interesting comparisons. Analysis of the mean scores for each of the variables did find some significant differences between nontraditional and traditional students as would be expected in particular areas of involvement.

Perhaps most interesting in comparing results for nontraditional and traditional students is that the

mean scores in the five domains of mattering were so similar. This may support the hypothesis, not explicitly part of this study, that the mattering concept is a factor of roughly equal importance to the institutional experiences of both and that nontraditional and traditional students are similar in their issues and concerns. In other words, perhaps all students do need to matter to their institutions, and perhaps mattering and involvement reinforce one another and contribute to student persistence.

The factors identified below may have affected the outcome of the study.

1. The use of the mattering scales instrument, designed to assess the perceptions of nontraditional students about their educational environments, with traditional students may have skewed some results in ways not apparent.

2. The percentage of nontraditional students in the sample (23%) was less than that found in the total institutional population (38%) for the academic year in which the survey was administered (1995-96). While the percentages of nontraditional and traditional students participating in the survey nearly matched their percentages in the class sections surveyed, the

difference from the population proportions may have undermined the representativeness of the sample.

3. The involvement and persistence questionnaire items created originally for this study may have been flawed in ways which skewed results obtained from the use of this instrument.

4. The study was not structured in such a way as to permit conclusions regarding causative relationships among the mattering, involvement and persistence variables.

5. The instrument was designed to measure student perceptions. Measurement of actual behaviors in levels of involvement and persistence toward educational goals would require a different methodological approach.

Recommendations

The following recommendations are intended to address the implications of the study for administrative practice in higher education settings:

1. The enhanced instrument used in this study could be administered to a sample of students each semester for a period of time to be determined. Combined with focus group and individual interviews, this approach could provide an ongoing assessment of student perceptions of the five mattering domains:

administration, advising; peers; multiple roles; and faculty. Interviews and discussions would provide for more in-depth consideration of how student perceptions of the educational environment are related to forms and levels of involvement and inclinations to persist.

2. A randomly selected sample from a total institutional population would probably provide a more representative sample than one derived from utilizing required course sections. This might be problematic if it required that a survey be conducted by mail.

3. The involvement and persistence questionnaire items should be reviewed for their efficacy in measuring student perceptions in those domains.

4. Alternative or additional statistical methods might possibly yield more meaningful findings pertaining to the potential relationships among the phenomena of mattering, involvement and persistence.

5. A qualitative research approach could be tried utilizing individual interviews and/or focus groups in conjunction with administration of a questionnaire.

6. Institutional research should examine academic and extracurricular involvement by students in terms of how the variables are related to the five

forms of mattering. Grade point averages, hours spent studying and contacts with faculty are examples of more specific measures of involvement than those used in this study. These, and similar measures of extracurricular involvement would be related to student scores on the five mattering scales. Results could then be used to identify areas of institutional life requiring attention and action.

Similarly, institutional research should be directed toward the questions of who persists and why they persist toward completion of educational goals. Exploration of potential relationships among the forms of student mattering perceptions and persistence behaviors might well be a part of this research activity.

As the results of the study were inconclusive with regard to potential relationships among the five forms of mattering and the variables of involvement and persistence, any practical recommendations drawn from the results and conclusions must be highly tentative.

The following recommendations address the implications of the study for administrative practice in higher education settings.

1. The enhanced instrument used in this study could be administered in a sample of students each

semester for a period of time to be determined. Combined with focus group and individual interviews, this approach could provide an on-going assessment of student perceptions of the five mattering domains: administration; advising; peers; multiple roles; and faculty. Interviews and discussions would provide for more in-depth consideration of how student perceptions of the educational environment are related to forms and levels of involvement and inclinations to persist.

More specific areas on which to focus attention are as follows:

a. The data indicate (Table 20) that administrative activities implemented in a service oriented manner may contribute to extracurricular involvement by nontraditionals. For traditional students, the data indicate that a student oriented administrative climate may contribute to involvement with peers. Administrative efforts in such areas as staff training; establishment of office hours; and development of procedures offer opportunities for the creation of service oriented climates.

b. The data indicate (Table 21) that advising practices may contribute to involvement with faculty and peers; to extracurricular involvement; and to inclination to persist for traditional students. This

suggests that advising really does matter for traditionals, but leaves its significance for nontraditionals unclear. The data similarly indicate that effective advising contributes to inclinations to persist among traditionals, but not nontraditionals. Institutional efforts might well be directed toward clarifying the advising needs of nontraditional students. The challenge would seem to be to support and enhance advising practices which traditional students perceive as meaningful, and to develop advising practices more attuned to the needs of nontraditionals.

c. The data indicate (Table 22) that institutional practices which promote perceptions of being accepted and belonging by students within the college setting may contribute to persistence for both nontraditionals and traditionals, and to some forms of involvement for traditionals. As with advising, the lack of linkages between peers mattering and involvement by nontraditionals calls for further exploration into the nature of nontraditional student-institutional relationships.

The areas indicated above are those which the study findings suggest are most significant and worthy of attention by administrators, faculty, and staff.

Leadership by administrators and senior faculty is likely to be required in creating an institutional culture conducive to promoting student perceptions that they matter, and to encouraging involvement and persistence. These dimensions of culture and climate are not likely to create and sustain themselves except in ad hoc fashions among institutional subcultures.

2. The regular monitoring of student perceptions of the five areas of mattering could be maintained with a reasonable expenditure of resources. Results would be provided to institutional personnel each semester as a means of promoting awareness of how students perceive the environment.

3. Working groups of personnel could be formed to address specific issues identified by this process. These groups would be interdepartmental; task-oriented; and solution-focused. They would be disbanded when the issue had been addressed, although the individual responsible for the on-going monitoring process could reconvene the group for evaluative purposes, or if new information or changing conditions had arisen.

Used in conjunction with other sources of information such as the Student Satisfaction Ratings of the ACT Student Opinion Survey, and the anecdotal

experiences of institutional members, the above process would provide the basis for the on-going monitoring of student perceptions. With administrative leadership that validates consideration of these perceptions in the formation of policies and procedures, such a process could well contribute to the development of an institutional climate in which students perceive themselves to matter, and an institutional culture committed to that goal.

Summation

The findings of this study, limited though they may be, do provide some basis for future research into the phenomenon of college student perceptions of mattering and the possible relationships of mattering to involvement and persistence by students. These relationships should be of interest to anyone seeking to create effective environments for learning and development in all forms of higher education settings. The provision of post-secondary educational opportunities for all or most citizens has been raised as a national priority. Assuming that institutions have specific climates pertaining to different aspects of college life, then a more sophisticated understanding of the student-college relationship can

contribute to the shaping of climates suited to
diverse student populations.

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